Andrea Norris Honored for Leading NIH's Innovative Cloud Initiative

For her leadership of NIH's STRIDES

Initiative, Andrea Norris, NIH CIO and Director of the Center for Information Technology (CIT), was honored with a 2021 Federal 100 Award on August 27. The Federal 100 Award is one of the most prestigious awards in the federal information technology space, and the honor goes to select leaders who have gone above and beyond to show how technology can be leveraged to make government run better.

Ms. Norris was instrumental in the formation and development of the STRIDES Initiative, which makes it easier for NIH-funded research programs to gain access to tools and services that can accelerate research and discovery. She helped forge partnerships with leading cloud service providers such as Google Cloud, Amazon Web Services, and Microsoft Azure. These partnerships made it possible for the initiative to grow and mature swiftly and gave NIH-funded researchers the ability to choose from a variety of cloud-based services to find the best fit for their research programs and data.

Since its inception in 2018, more than 500 research programs spanning more than 100 universities or research institutions have enrolled in the STRIDES Initiative. Today, there are hundreds of programs participating in the initiative using provided tools and services to analyze data and collaborate with other researchers. For example, research programs have moved more than 114 petabytes of research data into the cloud and have used more than 100 million hours of computational analysis in a wide range of biomedical research domain areas. More than 4,000 individuals have benefitted from STRIDES Initiative cloud training.

One of the largest data resources supported by the initiative is the National Library of Medicine's (NLM's) Sequence Read Archive (SRA). SRA data is the largest publicly available repository of high-throughput sequencing data, and it is used by more than 100,000 researchers each month. Before the STRIDES Initiative, researchers who wanted to use this archive effectively had to have efficient means to search and retrieve large datasets, sometimes to the scale of six petabytes, which could take days to download and was only possible for those with access to large-scale storage systems.

In addition, the STRIDES Initiative played an important role in enabling the biomedical research community to rapidly respond to the COVID-19 pandemic. Through the initiative's partnerships, NIH made the novel coronavirus genome sequence available to researchers around the world in a matter of days through NLM's GenBank. The initiative also supports a cloud-based COVID Digital Pathology Repository that helped the global biomedical community rapidly scale research in the race to develop a vaccine, and it supports the cloud-based COVID Rapid Acceleration of Diagnostics (RADx) Data Hub.

Congratulations to Ms. Norris on receiving this year's Federal 100 Award and to the great work of Nick Weber, the STRIDES Initiative Program Manager, who has been with the initiative since the very beginning; to the dedicated STRIDES Initiative and CIT team members; to NIH's industry partners who are committed to the scientific endeavor; and to all of the STRIDES Initiative participants who have worked with us to implement this initiative.